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09/776,232

Filed

February 2, 2001

- (New) The method of Claim 38, wherein the antigen comprises a protein or 40. peptide.
- (New) The method of Claim 38, wherein the antigen is delivered in a single 41. bolus.
 - (New) The method of Claim 38, wherein the antigen comprises a microorganism. 42.
- (New) The method of Claim 38, wherein the antigen is delivered in the form of a 43. nucleic acid encoding the antigen.
- (New) The method of Claim 43, wherein said nucleic acid is plasmid DNA in a 44. formulation comprising about 1-10% ethyl alcohol, 0-1% benzyl alcohol, 0.25-0.5mM EDTA and a citrate-phosphate buffer of pH 7.4-7.8, comprising about 3-50mM citrate and about 90 -200mM phosphate.
- (New) A method of inducing a CTL response in a mammal, which method 45. comprises:

delivering a liquid comprising an antigen in a continuous, repeated, or sustained manner directly to the lymphatic system of the mammal at a level sufficient to induce a CTL response in the mammal; and

maintaining the antigen in the mammal's lymphatic system over time sufficient to induce the CTL response.

- (New) The method of Claim 45, wherein induction of cytotoxic T lymphocytes is 46. obtainable independent of immunopotentiator.
 - 47. (New) The method of Claim 46, wherein the antigen is delivered with a cytokine.
- (New) The method of Claim 46, wherein the antigen is delivered in the form of a 48. nucleic acid encoding the antigen.
- (New) The method of Claim 45, wherein the antigen is provided as a component 49. of a microorganism cell, and wherein said microorganism cell comprises a recombinant nucleic acid encoding or promoting expression of said antigen.
- (New) The method of Claim 45, wherein the CTL response comprises an 50. immunological CTL response.
- (New) The method of Claim 45, further comprising obtaining a sustained CTL 51. response in the mammal and detecting a CTL response in the mammal.



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52. (New) A method of inducing or sustaining a CTL response in a mammal, which method comprises:

delivering an antigen to the mammal at a level sufficient to induce a CTL response in the mammal, wherein the antigen is delivered to the mammal by pumping a physiologically-acceptable composition of the antigen from a device held external to the mammal's body positioned to deliver the antigen-containing composition so that the antigen reaches the mammal's lymph system; and

maintaining the antigen in the mammal's lymphatic system over time sufficient to or maintain the CTL response.

- 53. (New) The method of Claim 52, wherein said pumping a physiologically-acceptable composition of the antigen comprises pumping from a device held external to the mammal's body through a transmission line.
- 54. (New) The method of Claim 53, wherein said transmission line comprises a catheter.
 - 55. (New) The method of Claim 54, wherein said catheter is at least 20 mm in length.
- 56. (New) The method of Claim 52, wherein the antigen is delivered to an area of high lymphatic drainage in the mammal.
- 57. (New) The method of Claim 52, wherein said maintaining step comprises maintaining the antigen in the mammal's lymphatic system sufficient to maintain the CTL response for a period of time that is substantially co-extensive with a desired duration of the CTL response.
- 58. (New) The method of Claim 52, wherein delivery of the antigen is directly to the lymphatic system.
- 59. (New) The method of Claim 52, wherein said delivering comprises delivering the antigen in the form of a vector comprising a nucleic acid encoding the antigen.

REMARKS

Claims 1-37 have been cancelled without prejudice. New Claims 38-59 have been added. The new Claims are supported by the specification as originally filed and no new matter is added by any of the new Claims.

